

# Xpress Micro Dialyzer GridKit48 Quick Guide

# Benefits

The Xpress Micro Dialyzer (MD) is a unique system designed for processing large quantities of samples for a variety of applications. The MD300 is delivered ready-to-use in a 48 deep well plate with 12 sample cartridges where each cartridge has 8 single sample segments. The design of the MD GridKit48 allows 48 samples and dialysis buffer to be loaded and removed from the top of the device without removing the cartridges. The MD may be used with automated liquid handling systems as well as common single and multi-channel pipettes. It is compatible with the SBS microplate standard.

Feature	Benefit
48-deep well plate instead of 96-deep well plate	<ul> <li>Standard micro plate formate (SBS)</li> <li>Higher dialysis buffer volume</li> <li>Higher concentration gradient</li> <li>Changing buffer without removing cartridges</li> </ul>
48-deep well plate with grid for automation	<ul> <li>Optimised for automated liquid handling</li> <li>Automated buffer exchange possible</li> <li>Fixed position of Micro Dialyzers</li> </ul>



▲ Figure 1 Xpress Micro Dialyzer GridKit48

Please refer also to the Manual & Data Sheet for the MD100 or MD300 for more details on specifications, handling, instructions, and chemical resistance.

#### Note:

Pipette tips must be inserted firmly and virtically into opening.

### Video demonstration

For a demonstration of the Dialyzer Family go to the website: <a href="https://www.scienova.com">https://www.scienova.com</a>



## Handling & Instructions

The GridKit48 is delivered with a 48-deep well plate, 96-fold grid, 6 cartridges Micro Dialyzers with 8 samples each and a lid. The buffer reservoir for each segment includes the area next to the Micro Dialyzer segment (figure 4, blue mark).

- Start loading the sample and then filling the outer buffer.
- 2. Fill dialysis samples (volumes from 10–100  $\mu$ l (MD100) or 50–300  $\mu$ l (MD300)) into the cartridges of the GridKit48. The opening of the cartridge is designed for the usage of 200  $\mu$ l (MD100) or 1000  $\mu$ l (MD300) pipette tips.
- 3. Fill the buffer into the empty wells with 4.5 ml (MD100) or 4.0 ml (MD300) buffer volume.



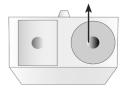
Fig. 4 | Three cartridges in a 48-deep well plate without grid

- 4. The dialysis starts subsequently after buffer is filled into each well. You can protect the samples with the lid.
- 5. After dialysis, take off the grid and remove the buffer from each well of the deep well plate.
- 6. Remove the sample by using the respective opening (figure 3 and 4). Aspirate the samples from the cartridge with a pipette (set to 130  $\mu$ l (MD100) or 330  $\mu$ l (MD300) in order to aspirate your samples completely).

© 2018 scienova GmbH | All rights reserved, including pictures and graphics. This print product is protected by copyright. No part of this print product may be reproduced in any form, including pictures and graphics, or utilized by any information storage and retrieval system without written permission from the copyright owner, except for brief quotations embodied in critical articles and reviews.

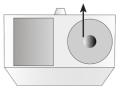
#### ▼ Figure 2

Opening for sample loading/removing



Head of a MD100 dialyzer (one segment)

Opening for buffer loading/removing (for usage in deep well plates)



Head of a MD300 dialyzer (one segment)

▲ Figure 3

## Manufactured by:



scienova GmbH Spitzweidenweg 30 07743 Jena Germany

p: +49 (0) 3641 504 586 f: +49 (0) 3641 504 587 e: info@scienova.com w: www.scienova.com